

Identifying trees species suitable for community-managed plantations

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Key Words

Domain Analysis, India, international development, forum, community engagement, natural resource management, forestry, agriculture, DRCSC

Context

Dhultikuri is a village in the Birbhum district of West Bengal, about 250 kilometers from Kolkata. The inhabitants are mostly landless and marginal farmers belonging to the tribal community known as Santhals. People depend on food from the forests and locally-available natural resources for nearly five months a year when they do not have any work or food in the village.

DRCSC has been working on natural resource management in this area for more than a decade. It has convened groups of unemployed youth and encouraged them to sustainably manage public properties such as the canal-sides, roadsides, fallow lands etc. by planting trees, protecting them, and growing short term crops that produce food, fodder, and fuel.

Unless the poor and landless benefit directly and quickly, community plantations are not likely to succeed. Selecting the correct tree species is key to success.

Questions

- What is the purpose of the plantation?
- How many and what are the tree species people wish to plant?
- What are the criteria for selecting the trees?
- What are the near-extinct native trees still found in the village?

Participants

- More than 30 men, women, and children participated during the first day. The meeting was held in the hamlet of Dhultikuli, where most of the members of Marangburu group live.
- On day two, participation declined as people could not make the time.
- The meetings were convened by field volunteers of DRCSC.

Tool

- Domain Analysis

Example Results

Domain Analysis was used to develop criteria and identify families of trees people are interested in planting. The steps were:

1. A large number of tree parts were placed along a line drawn on the ground with lime.
2. Participants were asked to choose three different trees and identify sameness and differences among them.
3. This information was used to create criteria, noted along the side of the table.
4. Then a rating scale was decided upon and the members rated each tree based on this scale.
5. Color cards and numbers were used to create the scale.
6. Participants were asked to group those trees with similar scores, using the color code and numbers as a guide. They were able to see families of trees, and decided on the trees they would like to plant.

At the beginning of the exercise, the group members mentioned only seven types of trees they wanted to plant. By using this tool, 42 tree species were identified, some of which are nearly extinct in the area. The group clearly understood which species of trees could be selected, and why.



Outcomes

- At the end of the exercise, 35 tree species were short listed in accordance with the expressed needs and preferences of families and their assessment of merits and demerits of different trees.
- As seedlings of most of the selected trees were not available locally, the group decided to set up its own nursery by collecting seeds of local plants and trees from a woodland 18 kilometers from the village.

Contributions of SAS²

- DRCSC has found that, at times, it is very difficult to motivate people to get involved in a process that promises only small benefits over the short term. The benefits from tree plantations are longer term. The exercise helped people see a wider range of potential benefits.
- Domain Analysis was very effective in involving and motivating people in the community, and in selecting tree species based on the community's needs and perspectives. Ways to manage time are needed, however, as the exercise took eight hours over two days.